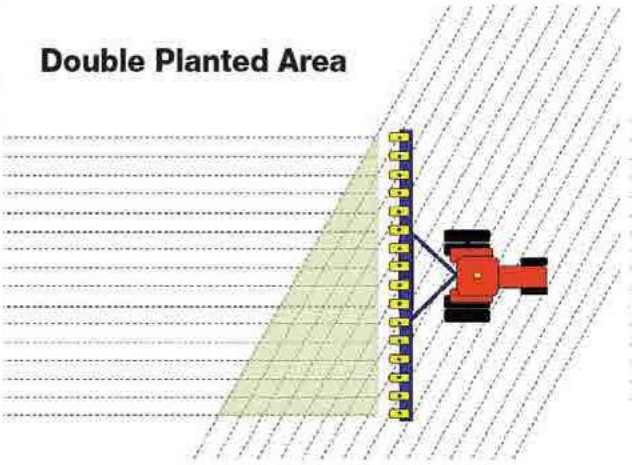
GLB Railroad Impact to Farmers

Point Rows

To minimize financial impact to farms that are crossed by the railroad, GLB should be required to run parallel to property lines whenever possible. Due to the design of farm machinery, the most profitable and most environmental friendly field is a square or rectangle. If a square is split by the railroad at an angle it creates what is called point rows. When a piece of farm machinery reaches these point rows it has to overlap until the entire width of the machine enters the headlands. This wastes fuel, uses extra seed, causes overlap of pesticides and fertilizer. The picture shows where this overlap occurs. With a 24 row planter, this wastes 1,450 seeds per pass. If the field is ½ mile wide, that is 44 passes into the headlands per side of the railroad. This wastes approximately 127,600 seeds. A bag of seed corn contains 80,000 seeds and can cost over $300 per bag. So not only does the farmer lose production from the easement, it also increases his cost of by $450 on the remaining acres. That is just increased seed costs. Fertilizer and pesticides are also over applied resulting in more additional costs. There is also a yield reduction in the double planted areas. The overlap results in twice the normal planted population. The plants struggle for resources at that the higher population and the yield in those areas suffer. Even the slightest angles cost major increases in costs, and lower income from overpopulation. To minimize impact to farmers point rows should be eliminated where possible by keeping the divided fields in squares or rectangles.



Field Edges

To also minimize impact to farmers the railroad should run along property lines when possible. When fields are split they create additional headlands and more field edges. Field edges and headlands can yield less then the field average due to extra traffic from headland turns, drainage issues, weed pressure and shadding from the easment. The oranges and reds on the map are low yielding parts of this field. Notice how the borders of the field yeild considerably less than the middle of the field. By dividing a field in half, it creates to additional edges to the field. If the field is small enough, the whole field becomes a headland and unproductive all together. When planning the final route, fields should not be split unless there is no alternative.